

CLAIMS

1. A method of printing a digital document comprising:
providing a first document for printing, the first document comprising at
5 least one functional area in which pattern markings are to be printed,
generating from the first document a second document in which at least one
of the shape and or size and or location of the at least one functional area is
modified,
obtaining a portion of pattern to fit the modified functional area; and
10 printing the second document.
2. The method of claim 1 in which the first document includes some
content.
- 15 3. The method of claim 1 or claim 2 in which the step of modifying the
document and/or obtaining the pattern for the functional area is performed
by a print application such as a printer driver.
4. The method of claim 3 in which the printer driver presents to a user
20 one or more prompts for the user to modify the first document.
5. The method of any preceding claim in which the step of obtaining
the pattern for the functional area includes a step of requesting a portion of
pattern for the functional area from a pattern allocation device.
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6. The method of claim 5 in which the amount of pattern requested and
the identity of the pattern (its location in pattern space) is determined
according to the size of the modified functional area.
- 30 7. The method of claim 5 or claim 6 in which the step of requesting
pattern comprises requesting an area of pattern larger than that which is

required for a functional area of a document and allocating a sub-portion to the functional area according to how it has been modified.

8. The method of any preceding claim in which the step of modifying
5 the functional area comprises increasing its size, varying its aspect ratio or rotating the area relative to the remainder of the document.

9. A digital document printing apparatus comprising:
a print application which receives a first document for printing, the first
10 document comprising at least one functional area in which pattern markings are to be printed,
a document generating means arranged to generate from the first document a second document in which at least one of the shape and or size and or location of the at least one functional area is modified, and
15 a pattern allocation unit which is arranged to allocate a portion of pattern to fit the modified functional area at the request of the print application in which the print application allocates pattern to the functional area according to its shape and or location and or size after modification.

20 10. The apparatus of claim 9 in which the print application is arranged to generate a print file which comprises a set of instructions in a language which can be understood by a printing device.

25 11. The apparatus of claim 10 which includes a printer which is adapted to print the second document together with the pattern markings.

12. The apparatus of any one of claims 9 to 11 in which the pattern allocation unit allocates a portion of pattern that is larger than the required and the print application allocates a sub-portion of this portion to the
30 functional space.

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13. The apparatus of any one of claims 9 to 12 in which the pattern allocation unit stores a set of identifiers which uniquely identifies each of a set of first documents and allocates a unique portion of pattern to each document.

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14. A computer program which is arranged to:
receive a first document for printing, the first document comprising at least one functional area in which pattern markings are to be printed,
generate from the first document a second document in which at least one
10 of the shape and or size and or location of the at least one functional area is modified, and
request a portion of pattern to fit the modified functional area from a source of pattern, the program allocating pattern to the functional area according to its shape and or location and or size after modification.

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15. A data carrier which has recorded thereon a set of program instructions which when running on a processor provide a print application which forms part of an apparatus according to any one of claims 9 to 13.

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